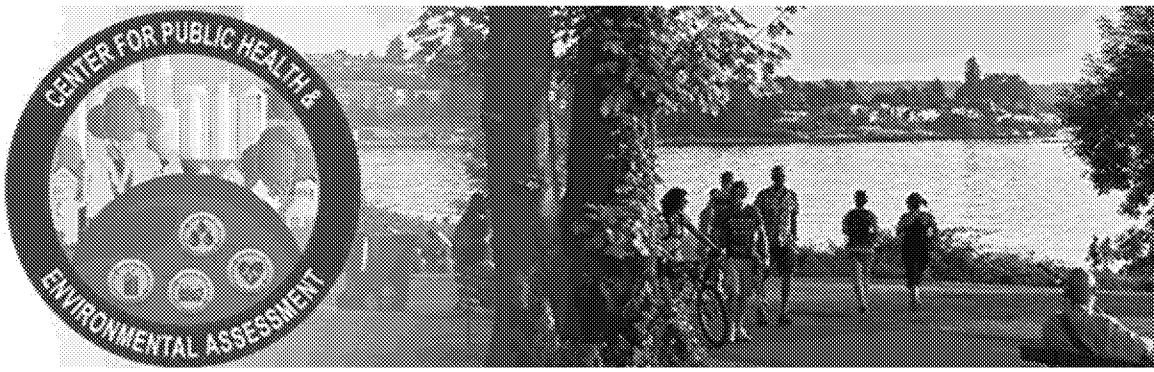
Message

From: Chuirazzi, Catherine [Chuirazzi.Catherine@epa.gov]
Sent: 12/2/2021 1:26:03 PM
To: ORD-CPHEA Feds and NonFeds [ORD-CPHEAFeds&NonFeds@epa.gov]
Subject: Catching Up with CPHEA: Week of November 29, 2021
Attachments: PESDispenserNov29.pdf



Welcome to the CPHEA!
Our CPHEA team brings together significant knowledge and capabilities in support of protecting public h

of November 29, 2021
Team CPHEA,

I hope everyone had a wonderful Thanksgiving filled with good food, family, and friends. As we head into the holiday sea
finishing touches on our newly renovated main building in Corvallis, OR.

We vacated the 1960-vintage laboratory building in June of 2018. Some labs were moth-balled, others crammed in with o
facility in Corvallis. Our Integrated Stable Isotope Research Facility (ISIRF) even moved 50 miles away to Newport for the c
into every nook we could find—so you can imagine they are excited as we began to spin the labs back up in October.

This renovation is the first major update to the building, originally constructed in 1966 (and it definitely looked like it). The
building. The entire interior was demolished and renovated. All of the building infrastructure is updated to modern standa
labs are modernized with in-house gas lines and brand new casework, countertops, and hoods. Offices, arranged mostly i
and staff have ample huddle and conference rooms, all equipped with modern teleconferencing kits.

The Region 9 lab out of Richmond, CA also moved in with us—collocating much of their analytical capability to Corvallis.
we eventually expect to have approximately 15 staff working in their lab space.

We're so proud of all the flexibility and resilience our staff showed during the three-plus year renovation. We are also exc
Although we still have some fine-tuning that will take us into next year, be on the lookout for a re-dedication invitation to

Alan Thornhill
Director, Pacific Ecological Systems Division

Events and Engagements	CPHEA
National Academy of Sciences Workshop (December 2, 2021): CPHEA's Jan Dye is presenting an overview of "Indoor Products: Endocrine Disruptors, Flame Retardants, PFAS" at *The Role of Companion Animals as Sentinels for Predicting Environmental Exposure Effects on Aging and Cancer Susceptibility in Humans: A Workshop*. OPPT Risk Assessment Training Series (December 3 and 10, 2021): CPHEA's Beth Owens and Samantha Jones are joining CSS' Katherine Dionisio to provide an "Overview of the ORD Strategic Research Action Plan (StRAP)." U.S. EPA and United Kingdom Environmental Agency: A Social Science Exchange Webinar on Communities, Adaptation, and a Changing Environment (December 7, 2021): CPHEA's Emily Eisenhauer is co-presenting a recently published paper on how the Proctor Creek Health Impact Assessment and Story Map project, conducted by Region 4 and ORD, addresses key elements of environmental justice including community capacity building. 2021 Mid Atlantic Regional Air Management Association (MARAMA) Air Quality Monitoring Training Committee Virtual Workshop (December 7, 2021): CPHEA's Kris Novak and Jason Sacks are delivering a presentation about the review process for the National Ambient Air Quality Standards (NAAQS) and evaluating health and welfare effects evidence in the Integrated Science Assessments.	**NASEM Peer Review o**

American Geophysical Union Annual Meeting (December 13-17, 2021): Several CPHEA scientists are participating.

Groundwater Technical Advisory Team (December 9, 2021): Researchers from CPHEA's Pacific Ecological Systems Division are working on a groundwater nitrate issue in the southern Willamette Valley and are presenting to this team at the Oregon Department of Environmental Quality (DEQ).

Society for Risk Analysis Annual Meeting (December 5-9, 2021): CPHEA's Amanda Bernstein is being awarded the 2021 DRSG Student/Postdoc Merit Award for her abstract, "A model template approach for rapid evaluation and application of physiologically based pharmacokinetic models for use in human health risk assessments."

Scientific Advisory Board Review of Documents (December 16, 2021): CPHEA researchers Michael Dzierlenga, Todd Zurlinden, Paul Schlosser, and Viktor Morozov assisted in completing "The Office of Water's Proposed Approaches to the Derivation of a Draft Maximum Contaminant Level Goals for PFOA and PFOS" that are under review.

Yesterday, November 30, 2021, EPA a

Academies of Sciences, Engineering, a
review report of the Office of Researc
Handbook for Developing Integrated
Assessments, or the IRIS Handbook. T
operating procedures for staffers dev
includes systematic review approache
that contributors to IRIS assessments
components are developed.

"EPA appreciates the NASEM's compr
Handbook," said Wayne Cascio, Actin
Administrator in EPA's Office of Resea
acknowledgement of the significant p
advance the science of systematic rev
the Agency, and EPA will continue to
following recommendations provided

EPA's IRIS Program develops assessm
associated with exposure to chemical
as hazard identification, and toxicity v
from that exposure. EPA's IRIS assessm
local health agencies, other federal ag
organizations to support decision-ma
existing EPA guidance and does not s
programs.

EPA contracted with the NASEM to co
Handbook. The report released today
impressive progress in developing an
The report acknowledges that "the IR
can serve as a model for other parts o
review methods." In addition, the NAS
Program's systematic review approac
clearly helping to advance the science
hazard identification." Key recommen
panel were generally focused on imp

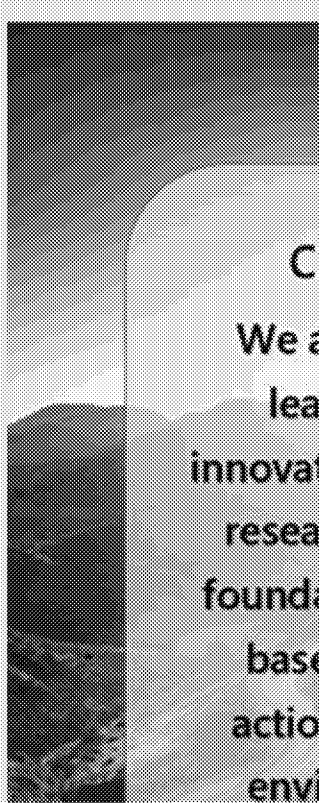
The IRIS Program will incorporate fee
advance the science of conducting ro
human health assessments.

To view the NASEM report, visit: http
of-us-epas-ord-staff-handbook-for-c

For more information on EPA's IRIS p

Research Spotlight

Inferring Pesticide Toxicity to Honey Bees



Check out the study "Inferring pesticide toxicity to honey bees from a field-based feeding study using a colony model and Bayesian inference" led by PHESD researcher Jeffrey Minucci.

The EPA Office of Pesticide Programs (OPP) registers pesticides under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). This research is an active collaboration with OPP to improve the Agency's method for evaluating the effects of pesticides on bee colonies. Honey bees provide essential pollination for many agricultural crops, but these services are threatened by increased colony losses in North America and Europe in recent decades. While multiple stressors are implicated (i.e., disease, habitat change, genetic issues linked to breeding), pesticides have been identified as an important contributor to these declines because they can cause direct mortality to individual bees, as well as a wide range of sublethal effects. The researchers present a method for inferring individual-level pesticide toxicity from colony-level field data using the VarroaPop+Pesticide agent-based colony model. They used data from a registrant-submitted feeding study on clothianidin, a neonicotinoid insecticide, where hives were dosed with spiked nectar of varying concentrations over a five-week period. Researchers implemented a Bayesian hierarchical model based on VarroaPop to explain the dynamics of single colonies in the feeding study. Researchers then applied Approximate Bayesian Computation (ABC) to fit our model to the empirical data and inferred parameters describing individual toxicity in VarroaPop. This method was done in a repeatable way so that it can be used by the program office for other pesticides of concern for honeybees.

Check out the full article here.

Division Spotlight

CPHE

Northeast Lakes Sediment Diatom RARE Project Featured on Vermont Public Radio

Federal Employee

Now's the time to enroll, c
Open season for FEHB hea

HEEAD's Sylvia Lee is featured in a recent Vermont Public Radio story.

voluntary leave bank mem

Vermont's Lake Fairlee has experienced an increase in phosphorous levels in the summer over the last 40 years. This has led to a decrease in water clarity and caused concerns over clean water. Too much phosphorous in a lake can lead to toxic algal blooms that can potentially disrupt fish habitats. Scientists can collect samples of layers of muck at the bottom of lakes to reveal the lake's history.

That's where Sylvia's work on diatoms plays a role. Diatoms are photosynthetic, single celled organisms that manufacture their own food

runs through December 13

A Virtual Health Fair is ava
through December 13, 202
live chat session with insur
the log in page to downlo
register for webinars and r

Employees may enroll in, c
the following plans:

- Health Plan
- Dental Plan
- Vision Plan
- Voluntary Leave Bank
- Flexible Spending Ac
  dependent care acco
  year. Employees MU

If you have questions or n
Benefits Open Season Sha
Shared Service Center Ben

just as plants do. Sylvia describes them as having "intricate patterns that

make them look like beautiful jewels of the sea." There are as many as 2 million species of diatoms globally, with scientists continually discovering new ones. Sylvia is helping to lead an effort on describing these new species, which will help the EPA gain a clearer picture of what lakes in New England looked like before being impacted by industry and development. Understanding these temporal changes in the lake's composition allows scientists to better prepare for future changes, especially in a time of rapid climate change.

Listen to the radio segment and read the full article on Sylvia's work with Lake Fairlee scientists here.

RAPID Update

The StRAP 4 Product proposal process is now open until February 12th. As part of StRAP 4 Product proposal has been added to Products within RAPID.

Proposed Sub-Products *(5000 character limit)*
For existing StRAP 3 Products that have associated Sub-Products, this field has been automatically populated

For new StRAP 4 Product Proposals, researchers will enter Proposed Sub-Products at the time of proposal en information on the potential Sub-Products related to the Product - these are flexible and can change. For ea should include:

- Sub-Product Type/Subtype for Clearance
- Sub-Product Potential Title
- Brief Description (1 to 2 sentences)

For more information, check these locations:

- Learn More About Development of Products and Sub-Products
- Submit Product Proposals in RAPID (video)

Publications and Products Highlights

The Publications and Products Highlights will resume next week.

To have your publication featured, you must provide the most current publication details (i.e., DOI, Author's Accepted

Interested in what's happening at PESD? View the PESDispenser Bulletin

The Center for Public Health and Environmental Assessment (CPHEA) provides the science needed to understand the con
nature in support of assessments and policy to protect human health and ecological integrity. CPHEA falls within EPA's O
Have ideas for the CPHEA Central? Want to highlight something in the Spotlight? Send your ideas to